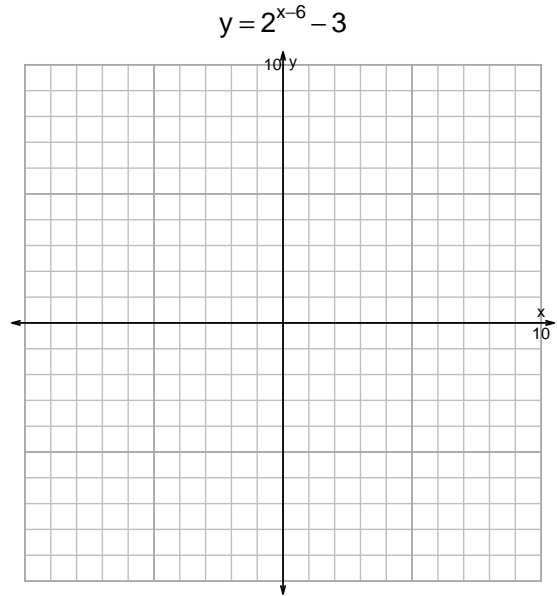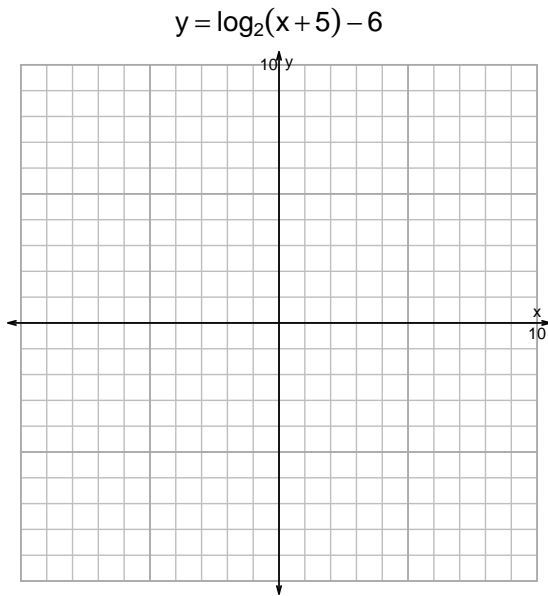Name: _____   Date: _____

s18quiz: EXP LOG (Practice v122)

1. Graph $y = \log_2(x + 5) - 6$ and $y = 2^{x-6} - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x+5) - 6$$

$$y = 2^{x-6} - 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-5}{4}\right) \cdot 2^{3t/7}$$

3. An exponential function $f(x) = 1.83 \cdot e^{-1.26x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(2.6)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(5)$.